

Yirmibesoglu, Funda; Ergun, Nilgun

**Conference Paper**

## FEAR OF CRIME IN ISTANBUL CITY CENTER

51st Congress of the European Regional Science Association: "New Challenges for European Regions and Urban Areas in a Globalised World", 30 August - 3 September 2011, Barcelona, Spain

**Provided in Cooperation with:**

European Regional Science Association (ERSA)

Suggested Citation: Yirmibesoglu, Funda; Ergun, Nilgun (2011) : FEAR OF CRIME IN ISTANBUL CITY CENTER, 51st Congress of the European Regional Science Association: "New Challenges for European Regions and Urban Areas in a Globalised World", 30 August - 3 September 2011, Barcelona, Spain

This Version is available at:

<http://hdl.handle.net/10419/119999>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

# FEAR OF CRIME IN THE ISTANBUL CITY CENTER

**Nilgun ERGUN**

Istanbul Technical University, Faculty of Architecture  
[ergunn@itu.edu.tr](mailto:ergunn@itu.edu.tr)

**Funda YIRMIBESOGLU**

Istanbul Technical University, Faculty of Architecture  
[funday@itu.edu.tr](mailto:funday@itu.edu.tr)

The mapping of crime and delinquency has been around for many years and the idea that delinquency is caused by environmental factors has long been debated. A significant characteristic of research on criminality is the use of charts and maps to show spatial distributions of delinquency and crime.

Istanbul has been a strategically important location, physically and regionally, at all times. Istanbul's most prominent characteristics are its geographical location, unique scenic beauties, and wealth of cultural and historical heritage. Istanbul has experienced increasingly high crime rates. This study demonstrates major differences between the characteristics of high and lower-crime neighborhoods in Istanbul. The distribution of crime in Istanbul shows that between the years 2000-2005, crime is concentrated in the city centre.

This research is based on the differences in physical, demographical and economical characteristics of Istanbul's districts, which show a rise in ratios of crime, especially in the city center such as the Beyoglu and Eminonu districts. In the Beyoglu central district which is economically better developed and with mixed land usage, differentiation in day/night population will be analyzed in order to determine how this could affect increase in crime.

The crime survey is conducted in the Beyoglu district between 2006 and 2008. The questionnaire results provide an insight into the mapping of crime in Beyoglu streets. The purpose of the study with this questionnaire is also to analyze fear from crime in the Beyoglu streets. At the end of the research, crime prevention strategies are going to be improved and new suggestions will be presented for the streets where crime rates are high.

**Key words:** crime, city center, Beyoglu,

## 1. Introduction

In studies made in developed countries, close relationships have been found between crime levels and the physical and demographic characteristics of residential areas related with land value characteristics. (Ackerman, 1976, 2004; Brantingham, et.al, 1980; Rengert, 1981; Kohlfeld and Sprague, 1988; Bursik and Grasmick, 1993; Harries, 1999). Consequently, it has been observed that the main reasons for the increase in urban crime and violence are the result of turmoil in the social, political and economic structures.

In developing countries on the other hand, political and economic changes, changes in the social structure as a result of migration, improper urbanization especially in big cities of these countries, lead to problems related with education, health, transportation and employment, which become factors that increase crime rates and criminal tendency. Furthermore, the turmoil caused by different value judgments besides traditional values, which came into existence as a consequence of industrialization, information technologies, and globalization is also a significant factor in the increase in crimes and crime rates.

A sustainable urban environment can be defined as an environment that does not threaten the safety of its present and future inhabitants, and does not create any concerns about people's personal security and safety of their possessions. As can be seen from the definition, the problem is not only about crime, but also about the fear of crime. For this reason, it is as important to cut down the fear of crime, as it is to prevent and reduce crime itself, since fear prevents people's activities and their ability to use the environment. According to Susan Smith (1989), when people are scared, they change their habits and tend to stay at home more often. When they do go out, they keep away from public transportation, and avoid particular streets and people. Therefore, fear of crime has a considerable influence on society's mood, human health, and quality of life. Fear of crime can turn places in to "forbidden grounds", and can make people feel disappointed with the justice system, and cause them to move out. Since those people who move out are generally wealthier, crime zones shift places.

With a population of 17 million, Turkey's largest city Istanbul is a city where urban quality of life has very intense positive and negative effects. Growing internal migration from rural areas to urban areas, rapid population growth, unemployment, and squatting recently resulted in rising crime rates.

## **2. Literature Review**

According to studies on the distribution of urban crime in urban areas in recent years, it is seen that distribution of crime varies due to multi-centered city developments with dynamic structures. (Harries, 1976, 1999; Elie, 1994; Rich, 1995; Craglia et.all, 1999, 2001; Openshaw, 1999; Anselin, et al. 2000; Paulsen, Robinson 2004; Ackerman, 1998, 2004; Ergun, Yirmibesoglu, 2005).

Modern theories in this tradition include the recent examples of Newman's (1972) "defensible space theory," Cohen and Felson's (1979) "routine activities theory," and Wilson and Kelling's (1982) "broken windows theory."

Kelling and Wilson's (1982) "broken windows" theory states that environmental disorientations and the increase in neglected buildings aggravate crime and vandalism, and therefore increase the environmental disorientation even more.

According to "routine activities" theory, opportunities play a role in the taking place of crime, and experts indicate that reducing the opportunities can prevent crime (Cohen, 1979; Clarke and others, 1993; Felson, and others, 1998; Jan van Dijk, 1994). This approach is used as crime prevention through environmental design, in the USA, Canada and Australia. In Europe, this concept is known as "the reducing of crime and fear of crime through urban planning, building design, urban management and maintenance." Crime prevention is thus generally defined as aiming to decrease real crime, and increase the sense of safety and security. (Newman, 1972; Taylor and others 1987; Plessis, 1999; Crowe, 2000; Van Soomeren, 2000; Cozens, 2001; Eck, 2003; Smith and others, 2003).

Research and evaluations have provided examples of situations where physical design or redesign appears to have contributed substantially to lowering crimes or to crime-related public order problems (Ralph et al, 1996).

- **Designing safer public housing.** Buildings with fewer apartments per entryway, fewer stories, and better views of the outside have residents with lower levels of fear and rates of victimization (Newman and Franck, 1980, 1982).
- **Erecting barriers and changing street patterns.** In a North Miami neighborhood, building barriers and altering street patterns seem to have helped residents reduce the volume of drug dealers and buyers driving through the area. The result: Crimes such as auto theft and assault declined more rapidly in their neighborhood than in the city as a whole (Atlas, 1991; Ycaza, 1992).
- **Controlling access to buildings, schools, parks, public housing, or other trouble spots through the use of regulated entry.** Measures used by the Bronx's Community and Clergy Coalition, for example, include requiring an identification card, setting limited hours of usage, diverting traffic through specific checkpoints, and using metal detectors in schools or other public buildings (Weisel, Gouvis, and Harrell, 1994).

- **Creating safer public places.** Seattle's Adopt-a-Park program removes overgrown trees and bushes and increases lighting in neighborhood parks to deter drug dealing, vandalism, and the presence of homeless people (Weisel, Gouvis, and Harrell, 1994). Success was reported for a similar Project in a major downtown public park in Stockholm (Knutsson, 1994).

In research made by Ergun and Yirmibesoglu since 1998, spatial differences in the distribution of crime according to various factors have been observed in İstanbul, and the highest rate of crime was established to be in; Eminonu, which is a center of commerce with a very high day time and low night time population; and Beyoglu, which is a commercial, cultural and entertainment center. These are not only large administrative, commercial and entertainment centers, but they also have a complex structure with wealth on one hand, and poverty on the other, cultural potential on one hand, and neglect on the other, a high rate of unemployment on one hand, facilities and potentials on the other. Additionally, a complex social texture has developed in these areas resulting from migrants from Anatolia.

However, while according to previous research Beyoglu had a high crime rate, this has started to change and the number of crimes committed are decreasing thanks to the recent gentrification process, restoration of buildings and urban design implementations in various streets.

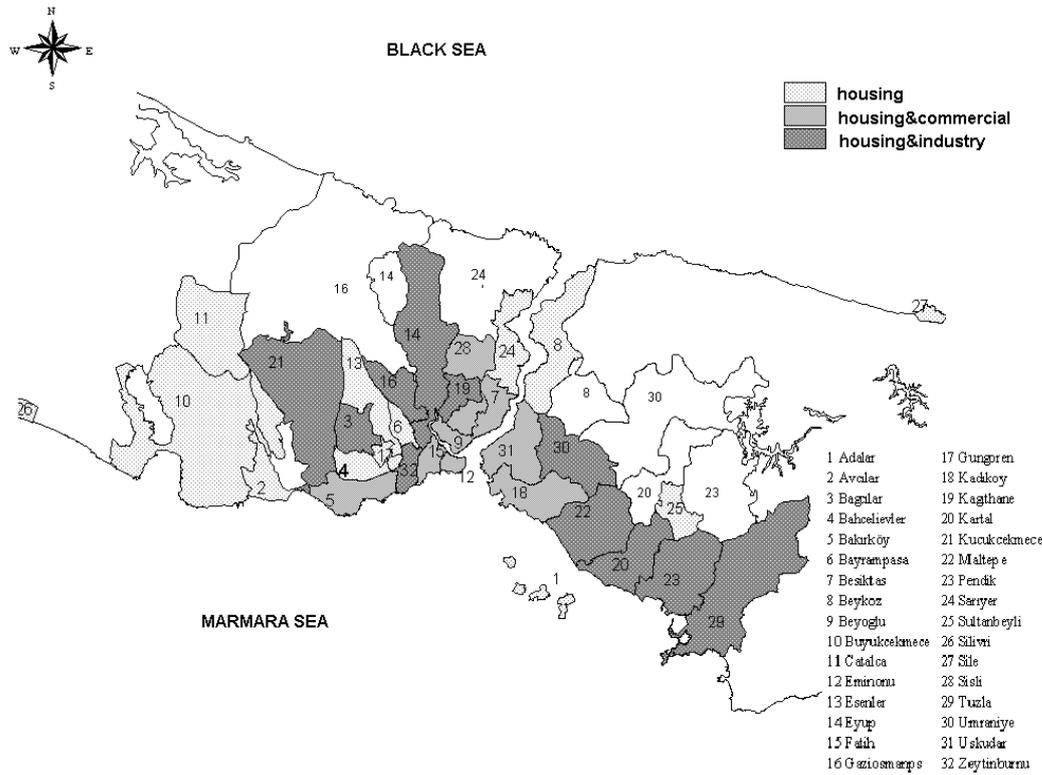
### **3. Distribution of Crime against Property and Persons in Istanbul**

Conducted in 32 district municipalities in Istanbul between the years 2000–2005, a descriptive study is made which evaluates the relationship between the distribution of crimes against property and persons, among districts and the different physical and social structures observed in these districts.

Land use is the most important factor. The data of land use was taken from the Istanbul Master Plan, prepared by Istanbul Metropolitan Municipality (IMM, 1995; IMM, 2000). Land uses were evaluated according to three categories "residential", "residential + commercial" and "residential + industrial" (IMM, 1995; Giritlioglu et al., 1993; Kilincaslan, 1974; Tekeli, 1994).

When the use of land is reviewed in the districts (map 1), it is observed that: Of the 18 districts, eight are residential-commercial land use; four are residential-industrial use while mainly residential use is observed in the remaining six districts.

Two of the eight districts having residential-commercial use [Eminonu, Beyoglu (on the European side)] are central business districts while the other six are peripheral districts [Fatih, Sisli, Besiktas, Bakirkoy (on the European side) and Uskudar, Kadikoy (on the Asian side)].



**Map 1. Land use in Districts**

In this study, crimes against property are defined as armed robbery, robbery (vehicles, businesses, homes), pick pocketing and snatch thievery, while crimes against persons are defined as murder, injury and/or harm (IPD, 2005).

Between 2000–2005, total crimes committed in Istanbul were 292,118 (not including traffic and terrorism related crimes) and the yearly average was 58,423.

Total crime average has been calculated per 10000 people in Istanbul between 2000-2005. Types of crimes committed are classified as crimes against persons and crimes against property.

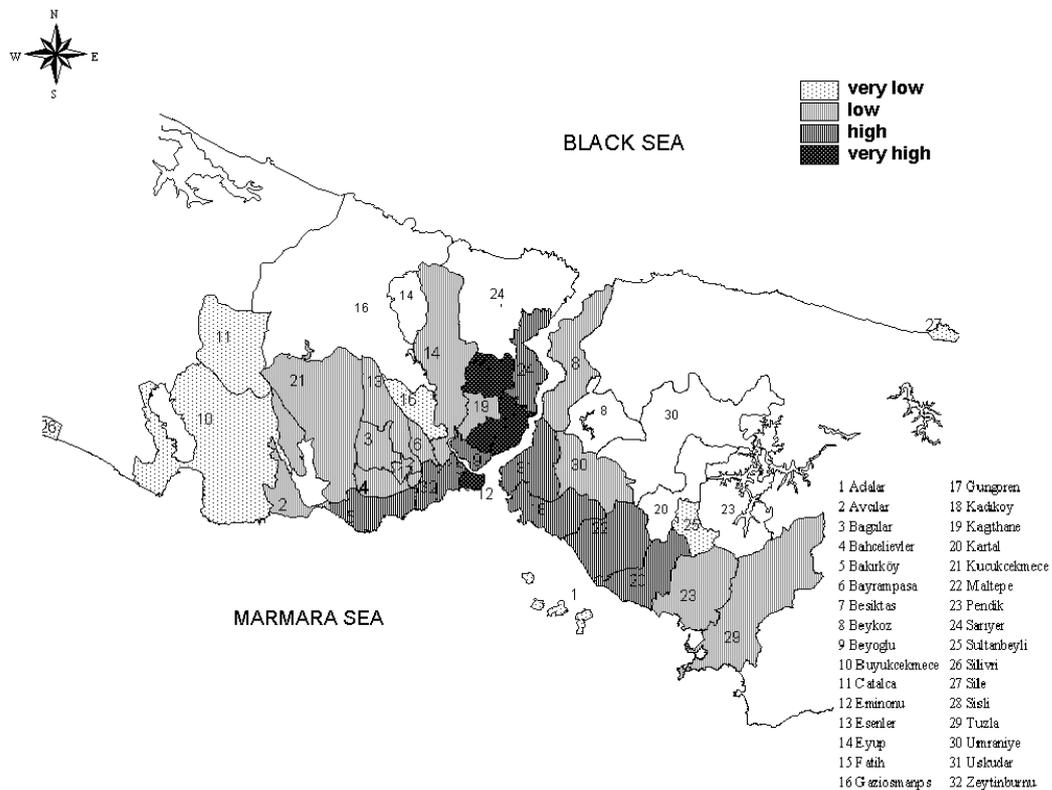
Total crime rate average is 64 in 10000; property crime rate is 5 in 1000 people; and the rate of crimes against persons is 1 in 1000. Rates below and above these averages have been classified as “very low”, “low”, “high” and “very high” respectively. Crime rates are rated as “high” and “very high” in 12 districts out of 32 in Istanbul between

2000–2005. Crime rates are rated as “high” in old districts, central and sub-central districts (IPD, 2005).

Distribution of property crime and personal crime are shown in maps 2 and 3, respectively, in Istanbul.

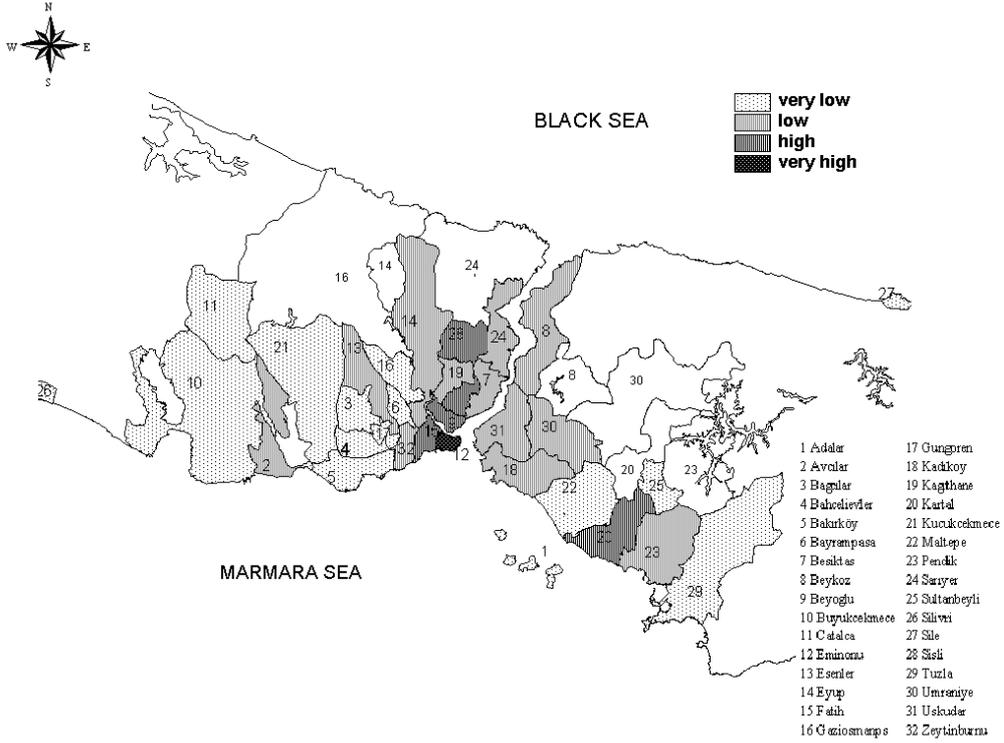
When we look at the spatial distribution of property crime, it is seen that crime rate is high in areas where land values are considerably high in Bosphorus’ two coasts and along the Marmara coast.

The highest rates of property crime are found on the European side; “Eminonu” (central business district). Other high rates of crime on the European side are observed in “Beyoglu” (central business district),



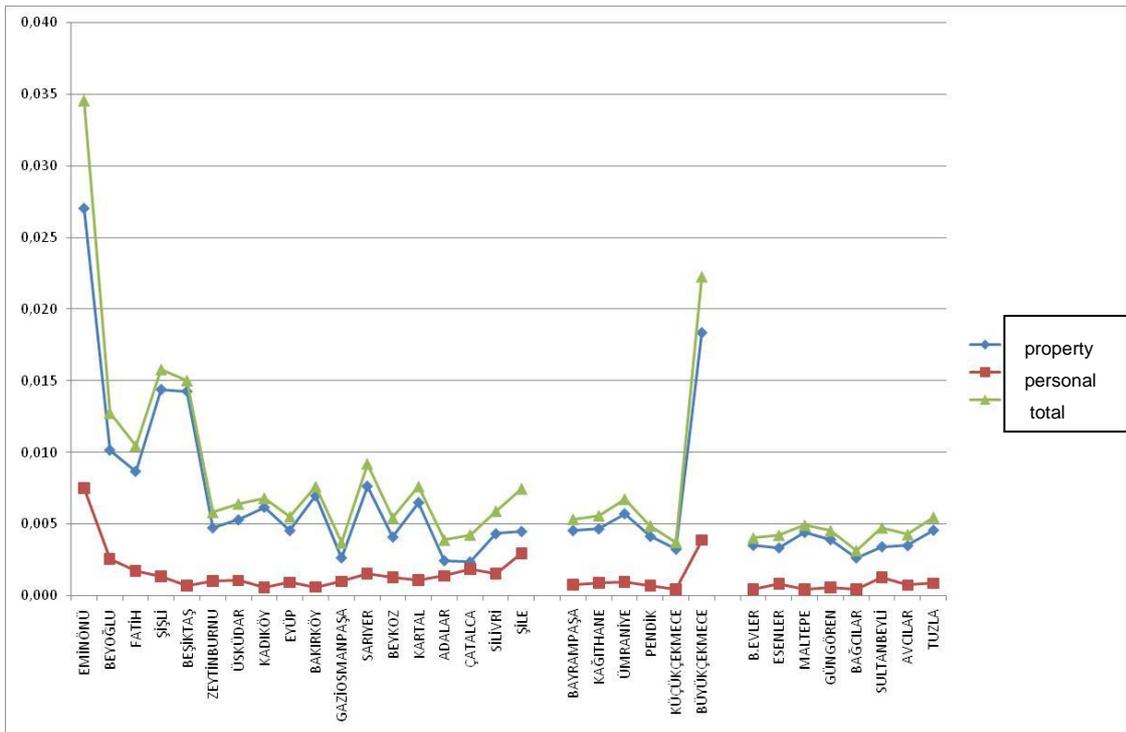
**Map 2.** Property Crime in Istanbul Between 2000-2005

“Eminonu” has the highest personal crime ratio (Map 3), followed by “Beyoglu” (central business district),



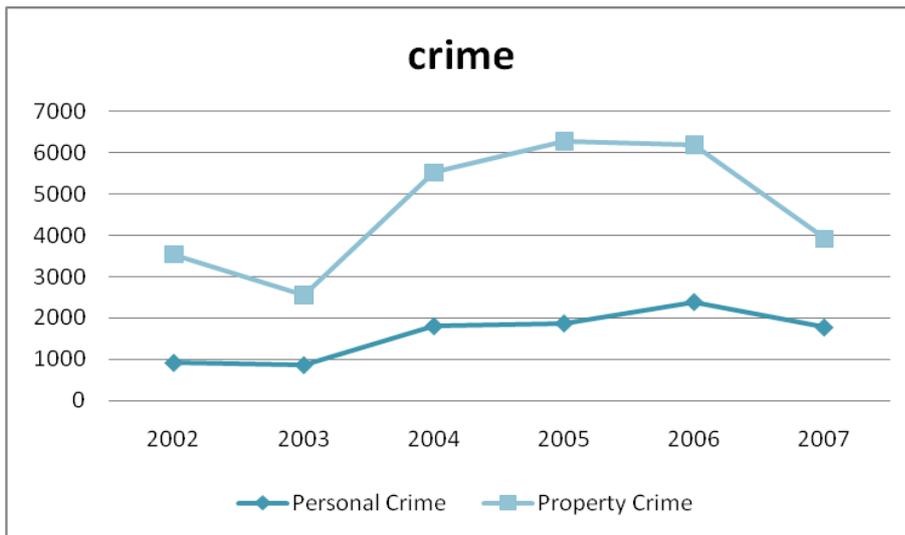
**Map 3. Personal Crime in Istanbul Between 2000-2005**

In an analysis made between the years 2000-2005, it is noted that districts away from the city center, especially Buyukcekmece, display a significant increase in property and personal crime.



**Figure: 1. Property, Personal and Total Crime in Istanbul Between 2000-2005**

Property and Personal Crime in Beyoglu Between 2002-2007 is shown below.



**Figure: 2.** Property and Personal Crime in Beyoglu Between 2002-2007 (IPD, 2008)

#### 4. Fear of Crime in Beyoglu

A commercial, cultural and entertainment center, with a settled population of 225.000, Beyoglu displays different characteristics due to a population which reaches millions during the day and night.

In Beyoglu district, a total of 300 surveys have been conducted; 100 surveys each for Cihangir, Asmalı Mescit, Galata neighborhoods, all of which had been recently renovated in 2006. This survey was repeated in 2008 in order to display the change. 300 people who participated in the survey are shown in the table below, showing male – female rates according to years. It can be seen that the number of males interviewed in 2006 and 2008 are higher (respectively, 57 and 89%).



If an evaluation is made, concerning the years 2006 and 2008 the survey was conducted, it is observed that mostly the young population (ages 20-40) were surveyed. 55.7% of the participants of the survey were born in Istanbul. This rate shows a tendency to decrease in 2008.

According to the 2006 statistics, when the duration of settlement in Istanbul is evaluated, rate of new arrivals (0-5 years) turns out very low, 13.7%. In 2008, this rate decreases to 7.3%. According to 2006 statistics, rate of settlement for 10 years or more is 73%. And in 2008, settlement for ten years or more is 84%.

Evaluating where the participants of the survey live in Istanbul, 2006 statistics show us that the rate of people living in city centers is considerably high at 46.7%. In 2008, this rate decreases to 36.7%. It is regarded that the rate of people who live in city centers or within 10 km of city centers is high (76.4% and 62.4% by order of survey years).

**Table 1.** Where people live

Survey Year	2006		2008	
	Number of people	%	Number of people	%
City center	140	46,7	110	36,7
Within 10 km	89	29,7	77	25,7
10-20 km	55	18,3	81	27,0
20-30 km	10	3,3	21	7,0
30 and more	3	1,0	7	2,3
Out of İstanbul	3	1,0	4	1,3
Total	300	100,0	300	100,0

As far as educational backgrounds, persons who participated in the survey in 2006, have a high educational level (43% high school, 29% university, %19.7 secondary school graduates). But in 2008, these levels are found to be decreasing.

Evaluating occupational groups, 2006 data shows us that the highest rate (29.3%) belongs to scientific and technical self-employed professionals. Commerce and sales professionals are second at 16.7%. Employees of the service sector turn out at 15.3% and non-agricultural employees at 11.7%. In 2008, commerce and sales professionals appear at a higher rate at 37.7%.

According to the reasons why participants come to Beyoglu, it appears that a high rate of 37.3% comes for residence in 2006, and 57% comes for business purposes in 2008.

**Table 2.** The Reason for Coming to Beyoglu

Year of Survey	2006		2008	
	Number of People	%	Number of People	%
Entertainment, shopping	96	32,0	27	9,0
Business	92	30,7	171	57,0
Residence	112	37,3	102	34,0
Total	300	100,0	300	100,0

When the weekly usage of Beyoglu is evaluated, the participants' weekly usage appears to be quite frequent. In 2006, maximum 46% visited Beyoglu daily. In 2008, daily usage had risen to 55.7%.

**Table 3.** Weekly Usage of Beyoglu

Year of Survey	2006		2008	
	Number of People	%	Number of People	%
Seldom	32	10,7	9	3,0
1-2	38	12,7	17	5,7
3-4	26	8,7	10	3,3
4-5	66	22,0	97	32,3
Everyday	138	46,0	167	55,7
Total	300	100,0	300	100,0

Concerning daytime safety in Beyoglu, most of the participants state that Beyoglu is safe during the day. It is observed to be 69.7% and 71.7% safe respective to survey years.

**Table 4.** Daytime Safety

Survey Year	2006		2008	
	Number of People	%	Number of People	%
Safe	209	69,7	215	71,7
Purse-snatching	15	5,0	22	7,3
Burglary	34	11,3	18	6,0
Deforcement	6	2,0	6	2,0
Personal	19	6,3	21	7,0
Other causes	17	5,7	18	6,0
Total	300	100,0	300	100,0

As far as nighttime safety in Beyoglu, a very large number of the participants state that Beyoglu is not safe at nights. Beyoglu is considered safe at a rate of 24.7% and 22.3% respective to survey years. Especially in 2008, the rate of feeling of safety seems to decrease.

**Table 5.** Nighttime Safety

Survey Year	2006		2008	
	Number of People	%	Number of People	%
Safe	74	24,7	67	22,3
Purse-Snatching	32	10,7	56	18,7
Burglary	75	25,0	45	15,0
Deforcement	21	7,0	19	6,3
Personal	58	19,3	67	22,3
Other causes	40	13,3	46	15,3
Total	300	100,0	300	100,0

Evaluating if people are afraid of walking alone in Beyoglu; most of the participants state that they are not afraid of walking alone in Beyoglu (approximately 80% to 72%). In 2008, there is a decreasing tendency.

**Table 6.** Fear of Walking Alone

Survey Year	2006		2008	
	Number of People	%	Number of People	%
Safe	241	80,3	217	72,3
Purse-Snatching	2	,7	17	5,7
Burglary	5	1,7	17	5,7
Deforcement	3	1,0	8	2,7
Personal	4	1,3	17	5,7
Other causes	45	15,0	24	8,0
Total	300	100,0	300	100,0

Streets where the participants feel unsafe can be seen below. These streets are streets that;

- are especially preferred by low income class, and the migrant population. Eg. Tarlabasi, etc.
- are dark and more desolate backstreets. Eg. Arslanyatagi, Sadri Alisik etc.

- have steep slopes enabling the criminal to run away easily. Eg. Meclisi Mebusan, etc.

Evaluating whether Beyoglu has major problems with crime, most of the participants had not experienced any in Beyoglu, (around 74% to 62%). In 2008, crime rates decrease significantly, so the rate of crime in Beyoglu has decreased. Those who did face crime had experienced crimes against property.

**Table 7.** Issues About Crime

Survey Year	2006		2008	
	Number of People	%	Number of People	%
No	222	74,0	186	62,0
Personal	5	1,7	11	3,7
Property and Personal	5	1,7	29	9,7
Property	68	22,7	74	24,7
Total	300	100,0	300	100,0

It was determined that most of the participants turn out to be facing crime related problems twice a year, (around 24% to 29%)

**Table 8.** How Many Times a Year

Survey Year	2006		2008	
	Number of People	%	Number of People	%
1	70	23,3	72	24,0
2	4	1,3	17	5,7
3	1	,3	5	1,7
4	2	,7	3	1,0
5	1	,3	3	1,0
6	1	,3	7	
Total	79	26,3	107	35,7
No	221	73,7	193	64,3
Total	300	100,0	300	100,0

When asked if relatives of the participants of the Beyoglu survey had experienced any problems, it was found that those who said “No” have increased in 2008 to 46.3%. Most of those crimes had been crimes against property.

When questioned how many times a year relatives face problems; the rate was found to be once a year, 47% in 2006 but fell to 17% in 2008.

When we examine factors which caused insecurity in 2006, participants had chosen other humans at only 8.3% in order of priority. In 2008 this rose to 41%. On the other hand, as can be seen in the table below, whereas the most effective factors that cause insecurity were users, Urban Decay, and poor lighting in 2006, these rates decrease in 2008 after renovations and restoration which took place in the district.

**Table 9.** Factors that Create Insecurity According to Priority

Survey Year	2006		2008	
	Number of People	%	Number of People	%
Humans	25	8,3	123	41,0
Users	134	44,7	129	43,0
Urban Decay	125	41,7	118	39,3
Poor Lighting	150	50,0	138	46,0
Unemployment	122	40,7	92	30,7

When we examine if Beyoglu is safe after the district was renovated, 50.3% of the participants stated that it is safe in 2006, but this rate decreases to 45% in 2008.

**Table 10.** Safety After Restoration

Survey Year	2006		2008	
	Number of People	%	Number of People	%
Yes	151	50,3	135	45,0
No	149	49,7	165	55,0
Total	300	100,0	300	100,0

Evaluating the reasons whether Beyoglu is safe or not after the renovation of the district, negative views about the area was 48.7% in 2006, and 51% in 2008.

**Table 11. Reasons**

Survey Year	2006		2008	
	Number of People	%	Number of People	%
Neutral	3	1,0	1	,3
Positive	151	50,3	146	48,7
Negative	146	48,7	153	51,0
Total	300	100,0	300	100,0

When a general evaluation is made after the survey, it is found that;

- Fear of crime with the ones who live within the research area is less than the ones who have come from the outside,
- The usage of Beyoglu has become more frequent,
- Number of people who come for commercial reasons has increased,
- Number of people who come for entertainment and shopping has decreased,
- In spite of the fact that the rate of exposure to crime is greater, number of people who think Beyoglu is safe during daytime has increased,
- Number of people who think it is safe during nighttime has decreased,
- Walking alone is safe (72-80%)
- People feel insecure in streets which are populated by low income class and migrants,
- People feel insecure in dark and desolate backstreets,
- People feel insecure in streets with steep slopes, where the criminal can get away easily.

## **5. Conclusion**

Beyoglu, which is one of two most important historical centers in the 17 million Istanbul, and where a gentrification process is being implemented since the 1980's, we have observed a downward trend in crime rates, thanks to urban design applications, especially in the recent years. In order to understand the effects of this trend on fear of crime, 600 people in the area have been interviewed in two year intervals and their impressions noted.

Our analysis shows that fear of crime in 2006 was less than 2008, due to the fact that the ones who lived in the area outnumbered the ones who visited the district for one reason or the other.

On the contrary, the 2008 survey revealed that the ones who came to visit the district outnumbered the population who lived there. Even though renovation applications have resulted in a decrease in crime, fear of crime has not fallen. It is observed that people who visit Beyoglu, still fear crime because of a previous exposure of themselves or their relatives.

As can be seen from the research, although the area was renovated, the rate of being exposed to crime is still high in its peripheries, therefore, in spite of the downward trend in the district, fear of crime remains.

Hence, it is understood that renovating one area is not enough, and it is necessary to expand the restoration applications to its peripheries. It is expected that future studies will shed more light to the subject.

## References

- Ackerman, W.V., Murray, A.T.** (2004) "Assessing spatial patterns of crime in Lima, Ohio", *Cities*, Vol. 21, No. 5, pp: 423–437, 2004, Published by Elsevier Ltd., Printed in Great Britain
- Ackerman, W. V.** (1998) "The spread of crime to smaller Ohio cities and the spatial distribution of crime in Lima", *Ohio. The Justice Professional* 10, pp: 265–289.
- Anselin, L., Cohen, J., Cook, D., Gorr, W., Tita, G.** (2000) "Spatial Analyses of Crime. In *Criminal Justice: Measurement and Analysis of Crime and Justice*", ed. Duffe, David, 4: pp: 213-262. Washington DC: National Institute of Justice.
- Atlas, R. (1991).** "The Other Side of CPTED." *Security Management*.
- Clarke, R. V., Felson, M.** (Eds.). (1993) "Routine Activity and Rational Choice: Advances in Criminological Theory", 5. New Brunswick, NJ: Transaction Books.
- Brantingham, P J And Brantingham, P L** (1980) "Crime occupation, and economic specialization. In *Crime: a Spatial Perspective*" (eds.) D E George-Abeyie, K D Harries, Columbia University Press, New York.
- Bursik, Jr. R J And Grasmick, H G** (1993) "Neighborhoods and Crime". Lexington Books, New York.
- Cohen, L. E, Felson, M..** (1979) "Social Change and Crime Rate Trends: A Routine Activity Approach", *American Sociological Review* 44: pp: 588-608.
- Cozens, P. M.,** (2001) "Sustainable Urban Development and Crime Prevention Through Environmental Design for the British City. Towards an Effective Urban Environmentalism for the 21st Century", *Cities*, vol:25 issue:3, pp: 123-128.

**Craglia M., Haining R. And Signoretta, P.** (2001) "Modeling High-Intensity Crime Areas In English Cities", *Urban studies*, Vol.38, No.11, pp: 1921-1941.

**Craglia M., Haining R. And Signoretta, P.** (1999) "Modeling the Geography of High Crime Areas in UK Cities: a GIS Based Approach", Paper presented at the Second AGILE Conference, Rome, 15-17 April 1999, Rome: Universita' La Sapienza.

**Crowe, T. D.** (2000) "Crime Prevention Through Environmental Design", Butterworth - Heinemann, Oxford.

**Eck, J., Weisburd, D.** (2003) "Crime Places In Crime Theory", *Crime Prevention Studies*, vol. 15, edited by Johannes Knutsson. Monsey, New York: Criminal Justice Press, Willan Publishing, UK).

**IPD**, (2008), Istanbul Police Department, Archive Data.

**IPD**, (2005), Istanbul Police Department, Archive Data.

**Elie, D.** (1994) "Spatial Analysis of Crime" (*Analyse Spatial et Criminologie*), *Criminologie*, 27 (1), pp: 7-21.

**Ergun, N., Yirmibesoglu, F.** (2005) "İstanbul'da Suc ve Suc Dağılımı" *Türkiye'de Kriminoloji ve Ceza Adaleti: Yeni Arastirmalar – Yeni Projeler Kolokyumu*, Bilgi Univeritesi-TUBITAK, Istanbul.

**Ergun, N.**, (2004), "Gentrification in Istanbul", *Cities*, Elsevier, Vol. 21, No 5, pp. 391-405

**Felson, M., Clarke, R.V., (Ed. Barry Webb, B.),** (1998) "Opportunity Makes the Thief Practical theory for crime prevention", Home Office, Policing and Reducing Crime Unit Research, Development and Statistics Directorate

**Giritlioglu, C., Bolen, F., Erkut, G., Ergun, N., Yirmibesoglu, F.** (1993) "Metropolitan Sehir Merkezlerinde Kullanılmayan Yapı-Konut Potansiyelinin Yeniden Degerlendirilmesi", TUBITAK Arastirma Projesi, Istanbul.

**Harries, K.** (1974). *The Geography of Crime and Justice*. New York, NY: McGraw Hill.

**Harries, K.** (1999) "Mapping Crime: Principles and Practice". Washington DC: National Institute of Justice (NCJ 178919).

**I.M.M.** (2000) *Istanbul Büyükşehir Belediyesi, Sayılarla İstanbul, İstanbul'daki Mevcut Gecekonduların İlcelere Göre Dağılımı*, Mesken ve Gecekondu Müdürlüğü,

**I.M.M.** (1995) *Istanbul Büyükşehir Belediyesi, İstanbul Master Plan*.

**Jan Van Dijk**, (1994) "Understanding crime rates: On interactions between raional choices of victims and offenders" *British Journal of Criminology* , Vol 34, pp: 105-121.

**Kilincaslan, I.** (1974) "Buyuk Istanbul Sehrinde Hizmetler ve Belediye Giderleri Analizi Uzerine Bir Deneme", ITU Mimarlik Fakultesi Baski Atolyesi, Istanbul.

**Knutsson, J.** (1994). "The Vassapark Project." Paper presented at the Environmental Criminology and Crime Analysis Conference, Rutgers University, Newark, NJ.

**Kohlfeld, C. W., Sprague, J.** (1988) "Urban Unemployment Drives Urban Crime" *Urban Affairs Quarterly*, 24, pp: 215–241.

**Newman, O.** (1972) "Defensible Space: Crime Prevention Through Urban Design" NY: Macmillan.

**Newman, O., Karen F.**, (1980). Factors Influencing Crime and Instability in Urban Housing Developments. Washington, D.C.: U.S. Government Printing Office.

**Newman, O., Karen F.**, (1982). "The Effects of Building Size on Personal Crime and Fear of Crime." *Population and Environment* 5: pp: 203–220.

**Openshaw, S., Alvanides, S.** (1999) "Applying Geocomputation To The Analysis Of Spatial Distributions In Geographical Information Systems". 2d ed. Edited by P. Longley, M. Goodchild, D. Maguire, and D. Rhind. New York: John Wiley & Sons.

**Paulsen, D.,J., Robinson, M.,B.** (2004)" Spatial Aspects of Crime: Theory and Paractice", Allyn & Bacon Pub.

**Plessis, C.**, (1999), "The Links Between Crime Prevention And Sustainable Development", *Open House International*, Volume 24, No 1, pp: 33-40

**Ralph B. Taylor, Adele V. Harrell, (1996)**, "Physical Environment and Crime" January  
A Final Summary Report Presented to the National Institute of Justice, U.S. Department of Justice Office of Justice Programs National Institute of Justice

**Rengert, G.** (1981) "Burglary in Philadelphia: a critique of an opportunity structured model. In *Environmental Criminology*" (eds.) P J Brantingham, P L Brantingham, Sage, Beverly Hills, CA.

**Rich, T. F.** (1995) "The Use of Computerized Mapping in Crime Control and Prevention Programs", *NIJ Research in Action*.

**Smith, M.J., Cornish, D.B.** (ed) (2003) "Theory for Practice in Situational Crime Prevention", *Crime Prevention Studies*, Volume 16, Criminal Justice Press, Monsey, NY, USA, Willan Publishing, Devon, UK

**Smith, S.J.** (1989), "Social Relations, Neighbourhood Structure, and the Fear of Crime in Britain" , in D. Evans and D. Herbert (eds), *The Geography of Crime* (London: Routledge).

**Taylor, R.B., Gottfredson, S.** (1987) "Environmental Design, Crime, and Prevention, Communities and Crime", (Eds.) Albert, J. R., Tonry, M., The University of Chicago Press, pp: 403-407.

**Tekeli, I.** (1994) "The Development of the Istanbul Metropolitan Area: Urban and Administration and Planning", Kent Basimevi, Istanbul.

**Van Soomeren, P.** (2000) "Crime Prevention Solutions for Europe: Designing Out Crime, Conference on the Relationship Between the Physical Environment and Crime Reduction and Prevention", Amsterdam, The Netherlands.

**Weisel, D.L., Gouvis, C., Harrell, A.V.**, (1994). "Addressing Community Decay and Crime: Alternative Approaches and Explanations." Washington, D.C.: The Urban Institute. Final report submitted to the National Institute of Justice.

**Wilson, J. Q., Kelling G. L.** (1982) Broken Windows; *The Atlantic Monthly*, Volume 249, No. 3; pp: 29-38.

**Ycaza, C.**, (1992), "Crime Rate Drops in Shores." *The Miami Heral*.

**Yirmibesoglu, F.; Ergun, N.**, (2007), "Property and Personal Crime in Istanbul", *European Planning Studies*, Carfax Publishing, April 2007, 15, 3, pp: 339-355.